PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABIL

(Chapter II of the Patent Cooperation Treaty

WIPO PCT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTIO		See Form PCT/IPEA/416								
PC25862A	TOTAL OTTAL		See Form PCI/IPEA/416								
International application No.	International filing date (day)	nonth/year)	Priority date (day/month/year)								
P.CT/IB2005/000030	10.01.2005		20.01.2004								
International Patent Classification (IPC) or national classification and IPC											
A61K31/4164											
Applicant											
WARNER-LAMBERT COMPANY LLC et al.											
1 This report is the international preliminary examination report, established by this international Preliminary Examining											
Authority under Article 35 and trai											
2. This REPORT consists of a total	of 6 sheets, including this co	over sheet.									
3. This report is also accompanied b	• • •										
• •	a. Description sent to the applicant and to the International Bureau) a total of sheets, as follows:										
│	on, claims and/or drawings v ng rectifications authorized t	vhich have been an ov this Authoritv (se	nended and are the basis of this report e Rule 70.16 and Section 607 of the								
Administrative Instruct	ions).										
			ders contain an amendment that goes atted in item 4 of Box No. I and the								
Supplemental Box.	• •	• •									
b. (sent to the International B	b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)), containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental										
Box Relating to Sequence	Listing (see Section 802 of	the Administrative I	nstructions).								
4. This report contains indications re	lating to the following items:	:	•								
☑ Box No. I Basis of the opi	nion										
☐ Box No. II Priority	☐ Box No. II Priority .										
	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability										
☐ Box No. IV Lack of unity of			·								
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement										
☐ Box No. VI Certain docume			,								
☐ Box No. VII Certain defects	☐ Box No. VII Certain defects in the international application										
☐ Box No. VIII Certain observa	☐ Box No. VIII Certain observations on the international application										
Date of submission of the demand	Dat	te of completion of this	s report								
17.02.2005		40.0005									
17.02.2003	13	.12.2005	•								
Name and mailing address of the internation	al Aut	Authorized Officer									
preliminary examining authority: European Patent Office			in the state of th								
D-80298 Munich Tel. +49 89 2399 - 0 Tx: 5236	56 enmu d	ymour, L									
Fax: +49 89 2399 - 4465	•	ephone No. +49 89 23	399-								

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/IB2005/000030

	Вох	No. I Basis of the report				
1.	 With regard to the language, this report is based on the international application in the language in which it filed, unless otherwise indicated under this item. This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of: international search (under Rules 12.3 and 23.1(b)) publication of the international application (under Rule 12.4) international preliminary examination (under Rules 55.2 and/or 55.3) 					
2.	hav	Vith regard to the elements* of the international application, this report is based on <i>(replacement sheets which</i> lave been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this eport as "originally filed" and are not annexed to this report):				
	Description, Pages					
	1-97	as originally filed				
	Clai	ims, Numbers				
	1-15	as originally filed				
		a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing				
3.		The amendments have resulted in the cancellation of:				
		☐ the description, pages ☐ the claims, Nos.				
		☐ the drawings, sheets/figs				
		☐ the sequence listing (specify): ☐ any table(s) related to sequence listing (specify):				
4.	□ had Su	This report has been established as if (some of) the amendments annexed to this report and listed below d not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the pplemental Box (Rule 70.2(c)).				
		 ☐ the description, pages ☐ the claims, Nos. ☐ the drawings, sheets/figs ☐ the sequence listing (specify): ☐ any table(s) related to sequence listing (specify): 				
		If itom 4 applies some or all of these sheets may be marked "superseded."				

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/IB2005/000030

_		k No. III Non-establishment o olicability	f opi	nion with regard to novelty, inventive step and in	dustrial		
1.	The	questions whether the claimed ious), or to be industrially applica	ntion appears to be novel, to involve an inventive step have not been examined in respect of:	(to be non)-		
		the entire international applicati					
	⊠	claims Nos. 1-15 with respect to prodrugs					
		because:					
		the said international application, or the said claims Nos. relate to the following subject matter which doe not require an international preliminary examination (specify):					
		the description, claims or drawings (indicate particular elements below) or said claims Nos. are so unclear that no meaningful opinion could be formed (specify):					
		the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opini could be formed.					
	⋈	no international search report h	nas been established for the said claims Nos. as above				
		the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in ArC of the Administrative Instructions in that:					
		the written form	Image: Control of the	has not been furnished		6 9 8	
				does not comply with the standard			
		the computer readable form		has not been furnished			
				does not comply with the standard			
		the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.					
		See separate sheet for further	detai	ils			

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/IB2005/000030

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

3,4,6-8

No: Claims

1,2,5,9-15

Inventive step (IS)

Yes: Claims

No: Claims

1-15

Industrial applicability (IA)

Yes: Claims

1-15

No: Claims

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item III

The present claims do not fulfil the requirements of Articles 5 and 6 PCT to such an extent as to render a meaningful search impossible. It is unclear which technical features are necessary to perform the functional term "prodrug" and thus which specific compounds fall within the scope of the present claims. Moreover, this functional definition is a mere invitation to the skilled person to perform a research program in order to find the suitable variants (cf. definition in description p. 16). The invention cannot be carried out over the whole claimed area without imposing an undue burden on the skilled person, and the disclosure is thus considered to be insufficient. Consequently, the search and examination do not include prodrugs of the claimed compounds.

Re Item V

1. Reference is made to the following documents:

D1: US-A-4 808 607 D2: USA-4 968 681

D3: EP-A-0 300 278

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1, 2, 5 and 9-15 is not new in the sense of Article 33(2) PCT: The subject-matter of said claims overlaps with the disclosure of D1 and specific embodiments of D1 fall within the area of overlap (see passages referred to in search report).

The compounds of D2 differ from the present compounds in that they are hydroxylamines.

The compounds of D3 differ from the present compounds in that they are pyrrole derivatives.

3. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of the present claims does not involve an inventive step in the sense of Article 33(3) PCT.

The problem underlying the present application is seen in the provision of further imidazole derivatives as HMG-CoA reductase inhibitors and inhibitors of cholesterol biosynthesis (cf. present description, p. 4, lines 2-6).

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

PCT/IB2005/000030

Document D1, which is regarded as being the closest prior art, discloses imidazole derivatives having the present activity and structure. The types of substituents R² claimed in novel claims 3, 4 and 6-8 have been suggested in D2 and D3 for other closely related HMG-CoA reductase inhibitors containing C-linked imidazole and pyrrole templates: D2, column 1, line 14 - column 3, line 6, particularly definition of C¹; D3, p. 6, l. 43 - p. 8, l. 4, particularly formula la, definition of R⁴. It would therefore have been obvious for the person skilled in the art, faced with the abovementioned problem, to modify the known compounds as claimed.

An inventive step cannot therefore be acknowledged, in the absence of evidence showing that substantially all the claimed compounds have an unexpected property or improved activity with respect to the structurally closest prior art compounds, attributable to the distinguishing feature of the invention, which has yet to be established.